



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
|-----------------|-------------|----------------------|---------------------|------------------|

09/863,296

05/24/2001

Sung Bae Jun

LGE-005

9217

34610

7590

10/06/2003

FLESHNER & KIM, LLP
P.O. BOX 221200
CHANTILLY, VA 20153

EXAMINER

LU, KUEN S

ART UNIT

PAPER NUMBER

2177

DATE MAILED: 10/06/2003

3

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/863,296

Applicant(s)

JUN ET AL.

Examiner

Kuen S Lu

Art Unit

2177

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 May 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. The drawings are objected to because they fail to show necessary textual labels of features or symbols for elements 100-500 in Figs. 1 and every element in Fig. 3, as described in the specification. For example, placing a label "data server system", with element 100 of Fig. 1, would give the viewer necessary detail to fully understand this element at a glance. A **descriptive** textual label for **each numbered element** in these figures would be needed to fully and better understand these figures without substantial analysis of the detailed specification. Any structural detail that is of sufficient importance to be described should be shown in the drawing. Optionally, applicant may wish to include a table next to the present figure to fulfill this requirement. See 37 CFR 1.83. 37 CFR 1.84(n)(o) is recited below:

"(n) Symbols. Graphical drawing symbols may be used for conventional elements when appropriate. The elements for which such symbols and labeled representations are used must be adequately identified in the specification. Known devices should be illustrated by symbols which have a universally recognized may be used, subject to approval by the Office, if they are not likely to be confused with existing conventional symbols, and if they are readily identifiable."

"(o) Legends. Suitable descriptive legends may be used, or may be required by the Examiner, where necessary for understanding of the drawing, subject to approval by the Office. They should contain as few words as possible."

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-7, 9-14 and 16-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jain et al. (U.S. Patent 6360234 B1), and further in view of Ottesen et al. (U.S. Patent 5930493).

As per claims 1, 10 and 18, Jain et al. (hereafter Jain) teaches the following:

"...providing multimedia data to subscribers" at Fig. 1, element 102, col. 3, lines 48-52 where a live satellite feed provides multi-media to clients;

"...an index server system for receiving streams transferred from the data server system to subscribers" at Fig. 1, element 110, col. 3, lines 43-46, "extracting index data from the received streams" at col. 2, lines 12-15, "and providing the extracted index data to subscribers" at Fig. 17, col. 3, lines 12-15 where a multi-media cataloger provides extracted index data to clients; and

receiving live satellite feed at col. 3, lines 47-49, "playing the multi-media data from the data server system" at Fig. 1, element 140, col. 3, lines 63-67, "providing a user interface" at Fig. 1, element 130, col. 3, lines 53-58, "to perform non-linear search and browsing using the index data provided from the index server system" at col. 2, lines 12-15, Fig. 17, col. 3, lines 12-15.

Jain does not specifically teach multi-media server, subscriber equipment for recording and subscribers.

However, Ottesen et al. (hereafter Ottesen) teaches multi-media server at col. 3, lines 56-62, real-time recording and playing at col. 8, line 64 through col. 9, line 4, and subscriber set-top control system and subscriber interface at col. 3, lines 51-55.

It would have been obvious to one having ordinary skill in the art at the time of the

applicant's invention was made to combine Ottesen's reference into Jain's teaching by using content server as multi-media server for directly providing media streams to the cataloger and specifically running subscribing software on the metadata server to interface and provide subscribing services to the clients because by doing so Jain's system would have become a multi-media server system for providing media streams, indexed data and subscription services to subscribers simultaneously.

As per claim 2, Jain teaches extracting structural index at col. 6, lines 32-33, semantic index at col. 6, lines 33-34 and summary index at col. 6, lines 54-57.

As per claim 3, Jain teaches structural index data including key frames at col. 6, lines 32-33.

As per claim 4, Jain teaches semantic index data including scene change at col. 6, lines 33-34.

As per claim 5, Jain teaches summary index data including user-defined group of data which includes summary index at col. 6, lines 54-57.

As per claim 6, Jain teaches "wherein the index server system includes at least one indexing engine" at Fig. 4, element 111, "having a program therein for automatically extracting the index data" at col. 2, lines 8-15 and "an interface means for manually or semi-automatically extracting the index data by an operator" at Fig. 11, col. 4, lines 14-17.

As per claim 7, Jain teaches "...wherein the index server system includes a transmitting means for transmitting the index data to the subscriber equipment " at Fig. 1, element 112, col. 14, lines 47-49.

As per claim 9, Jain teaches subscriber system that includes a communication

Interface at Fig. 1, element 150, col. 3, lines 43-47.

As per claim 11, Jain teaches "...extracting the index data is automatically performed using an index engine" at Fig. 4, element 111, col. 2, lines 8-15.

As per claim 12, Jain teaches "...the step of extracting the index data is manually performed by an operator" at Fig. 11, col. 4, lines 14-17."

As per claim 13, Jain teaches "...extracting the data is semi-automatically performed by combining an automatic extracting system...and a manual system by an operator" at Fig. 4, element 111, col. 2, lines 8-15 and Fig. 11, col. 4, lines 14-17.

As per claim 14, Ottesen teaches distributing multi-media programs concurrently to a plurality of subscriber set-top control systems at col. 3, lines 51-55.

As per claim 16, Jain teaches index data extraction in real time at col. 1, lines 66-67.

As per claim 17, Jain does not teach "store the multimedia stream", though Jain teaches "extracts the index data by indexing..." at col. 2, lines 10-15.

However, Ottensen teaches storing multimedia streams at col. 8, lines 64 through col. 9, line 4.

It would have been obvious to one having ordinary skill in the art at the time of the applicant's invention was made to combine Ottesen's reference into Jain's system by specifically recording multimedia streams at its content server such that recorded streams could be utilized for index extraction and then playing with indexed data simultaneously at later but pre-determined time which would enhance Jain's system as a pre-produced and pre-recorded multimedia streams provider.

As per claim 18, Jain further teaches index extraction for multimedia streams which

does not Specifically exclude when the streams is provided in advance at col. 2, lines 10-15.

As per claim 19, Ottesen teaches providing pre-recorded or pre-produced multi-media streams to subscribers at col. 8, lines 64 through col. 9, line 4.

As per claim 20, Ottesen teaches providing multi-media streams to subscribers at the time as requested by implementing a set-top control system on an on-demand and pay-per-view basis.

3. Claims 8 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jain et al. (U.S. Patent 6360234 B1) in view of Ottesen et al. (U.S. Patent 5930493), as applied to claims 1, 10 and 18-20, and further in view of Aras et al.(U.S. Patent 5872588).

As per claims 8 and 15, Jain or Ottesen does not specifically teach encoder or decoder as described in "...an encoder that encodes the index data to provide only permitted users with the index data, and wherein the subscriber equipment includes a decoder that decodes the index data received from the index server system", though Jain teaches index server system on extracting index data at col. 3, lines 43-46 and Fig. 9, col. 8, lines 23-32, and transmitting index data at col. 14, lines 47-49.

However, Aras teaches decoding at col. 24, lines 44-51 and encoding at Section "AVI Encoding Mechanism", col. 11, line 43.

It would have been obvious to one having ordinary skill in the art at the time of the applicant's invention was made to combine Ottesen and Aras' references into Jain's teaching by implementing encoding and decoding functions to Jain's cataloger system because without such an implementation, subscription of indexed data from the server would not be feasible, and thus the commercial potential of the index server system would

not be developed.

Conclusions

The prior art made of record

- A. U.S. Patent No. 6360234
- B. U.S. Patent No. 5930493
- C. U.S. Patent No. 5872588

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- D. U.S. Patent No. 6018744
- E. U.S. Pub. No. 2002/0146233 A1
- F. U.S. Patent No. 5802283
- G. U.S. Pub. No. 2002/0129140 A1
- H. U.S. Patent No. 5625404
- I. U.S. Patent No. 5483276
- J. U.S. Pub. No. 2002/0170062 A1
- K. U.S. Pub. No. 2002/0161747 A1
- L. U.S. Patent 5790176

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kuen S Lu whose telephone number is 703-305-0357. The examiner can normally be reached on 8 AM to 5 PM, Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Breene can be reached on 703-305-9790. The fax phone numbers

Art Unit: 2177


for the organization where this application or proceeding is assigned are 703-872-9306 for regular communications and 703-746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

KL

Patent Examiner

September 29, 2003


JOHN BREENE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100